

Work Order ID 125452

125452

Page 1

Monday, November 03, 2014 9:26:15 AM

Item ID: D2995 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bearpaw, 500
 Start Date: 10/6/2014 Start Qty: 2.00 Cust Item ID:
 Required Date: 10/6/2014 Req'd Qty: 2.00 Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2995	Rev A1

110	FLOW WATER JET	0.00							
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110
 Waterjet
 FLOW CNC Waterjet
 Memo
 CUT BLANK AS PER FILE D2995
 water jet as per drawing
 D2995 REV.A
 TPI
 P10.26351
 CD 14/11/10 36

120	HAAS CNC VERTICAL MACHINING #1	0.00							
-----	--------------------------------	------	--	--	--	--	--	--	--

120
 HAAS 1
 HAAS CNC vertical machine #1
 Memo
 Inspect material for defects or damage prior to machining Machine as per folio
 FA119Deburr
 13/21/15

130	QC2- Inspect parts off machine FAI/FAIB	0.00							
-----	---	------	--	--	--	--	--	--	--

130
 QC
 Quality Control
 Memo
 15/21/10

11/5/14 rec'd
 rec'd + inspect
 attached cofc to w/o
 6x SP 14-11-10

Work Order ID 125452

Tuesday, October 07, 2014 10:44:16 AM

125452

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Item ID: D2995 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bearpaw, 500
 Start Date: 10/06/14 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 10/06/14 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140	QC8- Inspect parts - second check	0.00							
140									
QC	Memo	0.00							
Quality Control									

150	Identify as per dwg & Stock Location: <u>St</u>	0.00							
150									
Packaging	Memo	0.00							
Packaging									

160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

Handwritten notes:
 15/01/16
 15/1/19
 15-1-19

DQA:

Date: 15/03/20



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 15/03/19

Work Order update only ☐

Work Order: <u>125452</u>	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
Part No. <u>D2995</u>		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. <u>15-4664</u>		Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling	15/1/15	100	1	Thickness at aft end is under tolerance. 0.950 is 0.925. over 1.7" length	DAS 12 9-89 15/1/15	Acceptable. Remaining thickness OK. Not critical stress location.	DAS 12 9-89 15/1/15	15/01/16	DD 15-02-16
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☒ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Tuesday, October 07, 2014 10:44:16 AM

Page 1

Work Order ID: 125452

125452

Parent Item: D2995

D2995

Parent Item Name: Bearpaw, 500

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP A01.03.07New IssueEC

IPP Rev:B New Manufacturing Process 08-11-15 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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MUHMWB10

Purchased

No

110

sf

723.4000

3.4

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

264 C214/11/103

Location

Loc Qty

Loc Code

MAT014

323.4

m128267

41

m128668

255.3

m129293

27.1

TPI

400

m130421

400

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DART AEROSPACE LTD		Work Order: 125452
Description: Bearpaw		Part Number: D2995
Inspection Dwg: D2995	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.625	+/-0.010	0.622	✓		MJP-04	vern
0.250	+/-0.010	0.250	✓		...	...
R0.25	+/-0.030	0.250	✓		—	Radius gauge
0.25 x 45°	+/-0.030 x 0.5°	0.260	✓		MJP-04	vern
5.86	+/-0.030	5.860	✓		...	...
0.950	+/-0.010	0.942	✓		...	...
0.433	+/-0.010	0.432	✓		118-110	deep tooth
19.00	+/-0.030	19.000	✓		MJP-07	Tape
4.25	+/-0.030	4.250	✓		MJP-04	vern
3.63	+/-0.030	3.630	✓		...	...
7.375	+/-0.010	7.375	✓		CNC-02	vern
11.625	+/-0.010	11.625	✓		...	...
0.38	+/-0.030	0.377	✓		MJP-04	vern
3.081	+/-0.010	3.083	✓		...	...
17.73	+/-0.030	17.730	✓		...	...
19.34	+/-0.030	19.340	✓		MJP-07	Tape
Ø0.260	+0.006/-0.001	0.260	✓		MJP-04	vern
0.30	+0.030/-0.000	0.320	✓		MJP-08	Dial depth gauge
Ø0.93	+/-0.030	0.930	✓		MJP-04	vern

Measured by:	<i>[Signature]</i>
Date:	15/01/10

Audited by:	<i>[Signature]</i>	DAS
Date:	15/01/16	08 9-89

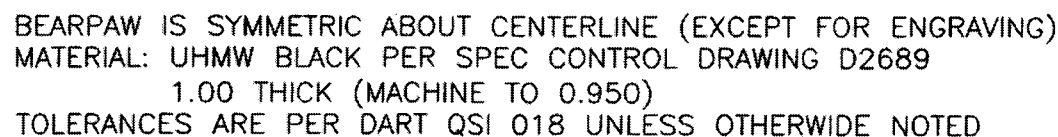
Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.02	New Issue	KJ/JLM	
B	09.05.19	Tolerances revised	KJ <i>[Signature]</i>	<i>[Signature]</i>

25 COPY ISSUED

MLS
14-10-0

01.03.14



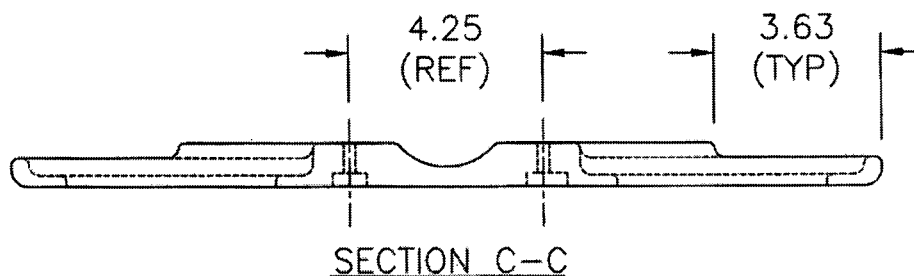
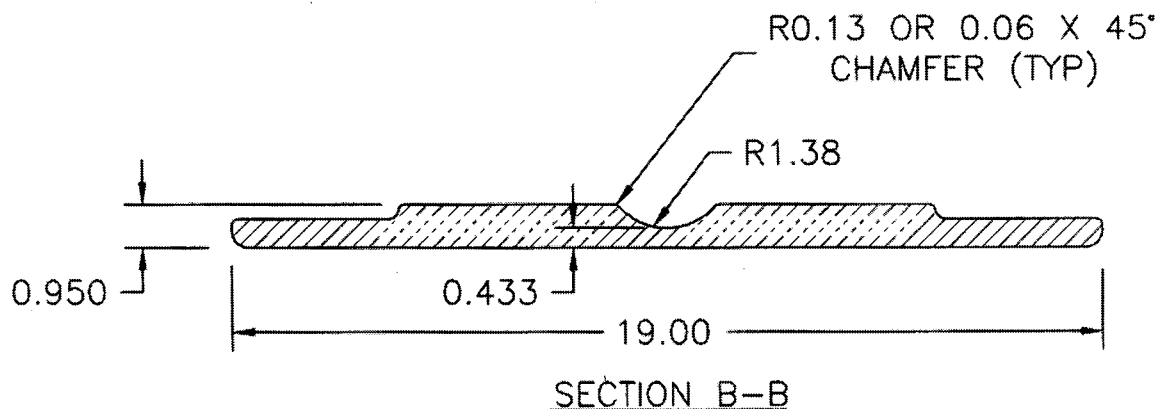
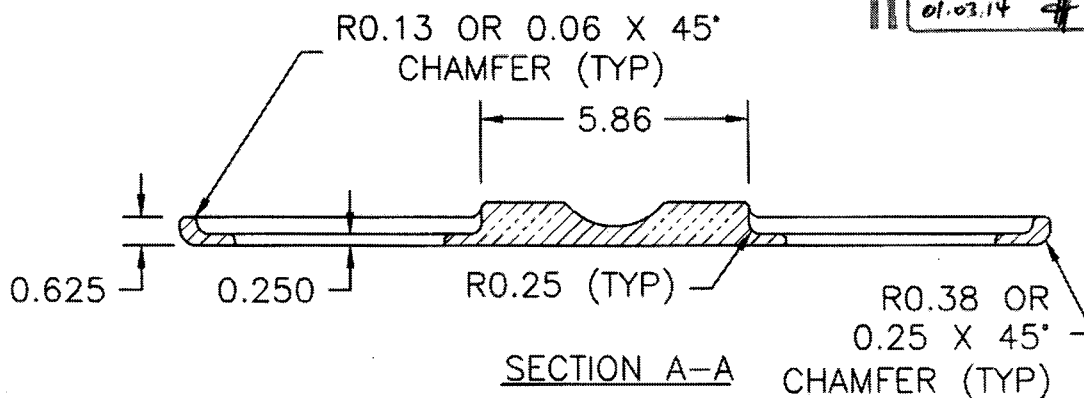
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DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>A</i>	APPROVED <i>A</i>	DRAWING NO. D2995	REV. A SHEET 2 OF 2
DATE 01.02.23		TITLE BEARPAW	SCALE 1:4

RELEASED
01.03.14 *A*



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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO26351**

Purchase Order Date 11/3/2014

PO Print Date 11/5/2014

Page Number 1 of 3

Order From :

TPI INDUSTRIES INC.
148 RUE GOODFELLOW
DELSON, QUEBEC J5B 1V4
CANADA

VC-TPI001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED QTY

Contact Name

Vendor Phone 450-633-0484

Ship To Contact

Ship To Phone

Ship Via: TST Overland

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
Line Comments		Promise Date					
Delivery Comments							
1	125452	D2995 BEARPAWS	11/10/2014		6.00	\$29.22	\$175.32
			Yes				
			11/10/2014				
CUT AS DWG D2995 REV. A							
						Line Total:	\$175.32
2	125797	D4353-041 BEARPAWS	11/10/2014		6.00	\$43.28	\$259.68
			Yes				
			11/10/2014				
CUT AS PER DWG D4353-041 REV. B							
						Line Total:	\$259.68
3	125851	D4353-3 BEARPAWS	11/10/2014		6.00	\$6.50	\$39.00
			Yes				
			11/10/2014				
CUT AS PER DWG D4353-3 REV. B							

Note:

11/5/2014

T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 6399
Date: 2014-11-06
Page: 1

Sold to: Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Ship to: Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 100812	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2014-11-06
Tracking No.:	

Item No.	Unit	Description	Quantity
d2995	Chaque	d2995.bearpaw ✓	6 ✓
d4353-041	Chaque	d4353-041 bearpaw	6
d5022-1p	Chaque	d5022-1p foam, side panel, fwd	12
d5022-3p	Chaque	d5022-3p foam, side panel, aft	4
d5022-5p	Chaque	d5022-5p foam, side panel, aft	4
d4353-3	Chaque	d4353-3 bearpaw	4
		PO 26351	

Comment: Des frais d'intérêts de 2% / mois seront chargés sur tout compte passé du après 30 jours